ABSTRACT OF THE DISCLOSURE

The utility of adenovirus vectors (Ad) for gene therapy is restricted by their inability to selectively transduce disease-affected tissues. This limitation may be overcome by the derivation of vectors capable of interacting with receptors specifically expressed in the target tissue. Previous attempts to alter Ad tropism by genetic modification of the Ad fiber have had limited success due to structural conflicts between the fiber and the targeting ligand. The present invention presents a strategy to derive an Ad vector with enhanced targeting potential by a radical replacement of the fiber protein in the Ad capsid with a chimeric molecule containing a heterologous trimerization motif and a receptor-binding ligand.